

## Letters to the Editor

### Laparoscopic surgery of an enterovesical fistula of tuberculous origin (terminal ileum and sigmoid colon)

*Key words: Fistula. Tuberculosis. Surgery. Laparoscopy.*

Dear Editor,

We report a 76-year-old male with enterovesical fistula. Symptoms were abdominal pain with urination, pneumaturia and fecaluria. History of transurethral resection of bladder polyps (benign). Barium and abdominal CT with contrast: intestinal fistula from terminal ileum and sigmoid to the bladder, which was thickened and showed inflammatory changes.

We perform laparoscopic surgery. Existence of adherence syndrome and found no granulomas or intra-abdominal collections. After extensive adhesiolysis, we observed a thickened area, with an intense inflammatory plastron in lower hypogastrium, corresponding to the bladder dome, which comprise terminal ileum and sigmoid. Methylene blue was applied by the catheter to confirm the fistula. We found a clear communication between the bladder and terminal ileum and a minor communication with sigmoid colon. Identification and section of the fistulas was performed, as well as removal of the bladder dome, ending with primary closure of the opening and closing the sigmoid (Fig. 1).

A right hemicolectomy was performed due to the seriously affection of the terminal ileum, which poor viability. We reinforced the bladder suture line, and the colonic anastomosis with Tachosil® (absorbable collagen sponge with human thrombin).

In the pathology were identified several ileal and colonic mucosal ulcerative areas, perforation and abundant granulation tissue. The bladder and the colon show multiple caseating granulomas. The histological findings suggested tuberculosis granulomatous disease type.

The postoperative course was favorable. Nowadays is monitored by the Department of Urology and Surgery, with no complications related to surgery, receiving appropriate treatment for tuberculosis.

### Discussion

The incidence of fistulas in patients with diverticular disease, the most common cause of colovesical fistula, is accepted to be 2% (1,2). The most common causes of acquired enterovesical fistulas have shifted from diseases such as typhoid, amebiasis, syphilis and tuberculosis, to diverticulitis, cancer, Crohn's disease, and iatrogenic causes are more common (2,3).

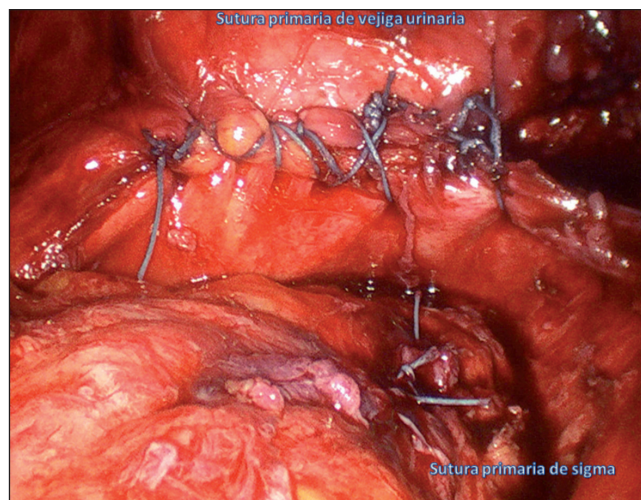


Fig. 1. Primary closure of sigma and urinary bladder.

The treatment of choice in the absence of healing by conservative surgery is trying to find the tract, total resection of these tracts and make a primary closing, anastomosis, or stoma, according the affected area (4,5).

In relation to laparoscopic treatment, several reports suggest that laparoscopic repair of colovesical fistula can be performed successfully with resection and anastomosis of the fistulous tract in the same surgical procedure, without adding morbidity to the patient, and that it has the advantage of less postoperative pain and early return to daily activities. (4-6).

In conclusion we emphasize that the laparoscopic approach is feasible in enterovesical complex fistulas and with the added benefits of postoperative comfort. Genitourinary and intestinal tuberculosis are uncommon causes of surgery today, but must be taken into account, especially in immunosuppressed people (with chemotherapy or viral immunosuppression) (7,8) or because of migratory movements.

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